

1 4. A network node as claimed in claim 3, wherein said second
2 switch is configured to receive the outbound cells from said multiplexers and
3 establish a plurality of virtual connections to apply the received outbound
4 cells to said ATM switch through the virtual connections.

1 5. A network node as claimed in claim 2, further comprising a
2 second switch for receiving said user cells from said demultiplexers and
3 establishing a plurality of virtual connections to apply the received user cells
4 to said ATM switch through the virtual connections.

1 6. A network node as claimed in claim 5, wherein the second
2 switch is further configured to receive said inbound cells from said ATM
3 switch, and apply the received inbound cells via the second switch to said
4 demultiplexers before receiving said user cells from said demultiplexers.

1 7. A network node as claimed in claim 4, wherein said virtual
2 connections established in said ATM switch and said second switch are
3 permanent virtual connections.

1 8. A network node as claimed in claim 4, wherein said virtual
2 connections established in said ATM switch and said second switch are
3 switched virtual connections.

1 9. A network node connected via incoming transmission links to a
2 plurality of distant nodes, comprising:
3 an ATM switch for establishing a virtual connection from any one of

09864276 "052501

4 said incoming transmission links to any one of a plurality of output ports
5 thereof; and
6 a plurality of demultiplexers respectively corresponding to said distant
7 nodes, the multiplexers receiving and demultiplexing inbound cells from said
8 plurality of output ports of the ATM switch into user cells and supplying the
9 user cells to said ATM switch, said inbound cells having any one of all virtual
10 channel identifiers assigned to said demultiplexers.

1 10. A network node as claimed in claim 9, further comprising a
2 second switch for receiving said user cells from said demultiplexers and
3 applying the received user cells to said ATM switch.

1 11. A network node as claimed in claim 10, wherein the second
2 switch is configured to receive said inbound cells from said ATM switch, and
3 applying the received inbound cells via the second switch to said
4 demultiplexers before receiving said user cells from said demultiplexers.

1 12. A network node as claimed in claim 10, wherein said virtual
2 connections established in said ATM switch and said second switch are
3 permanent virtual connections.

1 13. A network node as claimed in claim 10, wherein said virtual
2 connections established in said ATM switch and said second switch are
3 permanent virtual connections.

09864216.052501